

WHAT IS CLAIMED:

1. A purified DNA molecule encoding a human nNR1 protein wherein said protein comprises the amino acid sequence as follows:

MSSDDRHLGS SCGSFIKTEP SSPSSGIDAL SHHSPSGSSD ASGGFGLALG
THANGLDSPP MFAGAGLGGT PCRKSYEDCA SGIMEDSAIK CEYMLNAIPK
RLCLVCGDIA SGYHYGVASC EACKAFFKRT IQGNIEYSCP ATNECEITKR
RRKSCQACRF MKCLKVGMLK EGVRLDRVRG GRQKYKRRLD SESSPYLSLQ
ISPPAKKPLT KIVSYLLVAE PDKLYAMPPP GMPEGDIKAL TTLCDLADRE
LVVIIGWAKH IPGFSSLSLG DQMSLLQSAW MEILILGIVY RSLPYDDKLV
YAEDYIMDEE HSRLAGLLEL YRAILQLVRR YKKLKVEKEE FVTLKALALA
NSDSMYIEDL EAVQKLQDLL HEALQDYELS QRHEEPWRTG KLLLTLP LLR
QTA AKAVQHF YSVKLQ GKVP MHKLFLEMLE AKAWARADSL QEWRPLEQVP
SPLHRATKRQ HVHFLTPLPP PPSVAWVGTA QAGYHLEVFL PQRAGWPRAA,
as set forth in three-letter abbreviation in SEQ ID NO:2.

2. An expression vector for expressing a human nNR1 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 1.

3. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 2.

4. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 2 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

5. A purified DNA molecule encoding a human nNR1 protein wherein said protein consists of the amino acid sequence as follows:

5 MSSDDRHLGS SCGSFIKTEP SSPSSGIDAL SHHSPSGSSD ASGGFGLALG
 THANGLDSPP MFAGAGLGGT PCRKSYEDCA SGIMEDSAIK CEYMLNAIPK
 RLCLVCGDIA SGYHYGVASC EACKAFFKRT IQGNIEYSCP ATNECEITKR
 RRKSCQACRF MKCLKVGMLK EGVRLDRVRG GRQKYKRRLD SESSPYLSLQ
 ISPPAKKPLT KIVSYLLVAE PDKLYAMPPP GMPEGDIKAL TTLCDLADRE
 LVVIIGWAKH IPGFSSLSLG DQMSLLQSAW MEILILGIVY RSLPYDDKLV
 10 YAEDYIMDEE HSRLAGLLEL YRAILQLVRR YKCLKVEKEE FVTLKALALA
 NSDSMYIEDL EAVQKLQDLL HEALQDYELS QRHEEPWRTG KLLLTLP LLR
 QTAAKAVQHF YSVKLQ GKVP MHKLFLEMLE AKAWARADSL QEWRPLEQVP
 SPLHRATKRQ HVHFLTPLPP PPSVAWVGTA QAGYHLEVFL PQRAGWPRAA, as
 set forth in three-letter abbreviation in SEQ ID NO:2.

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6. An expression vector for expressing a human nNR1 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 5.

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7. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 6.

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8. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 6 into a suitable host cell; and,

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(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

9. A purified DNA molecule encoding a human nNR1 protein wherein said DNA molecule comprises the nucleotide sequence as set forth in SEQ ID NO:1, as follows:

GAATATGATG ACCCTAATGC AACAAATATCT AACATACTAT CCGAGCTTCG
5 GTCATTTGGA AGAACTGCAG ATTTTCCTCC TTCAAAATTA AAGTCAGGTT
ATGGAGAACA TGTATGCTAT GTTCTTGATT GCTTCGCTGA AGAAGCATTG
AAATATATTG GTTTCACCTG GAAAAGGCCA ATATACCCAG TAGAAGAATT
AGAAGAAGAA AGCGTTGCAG AAGATGATGC AGAATTAACA TTAAATAAAG
TGGATGAAGA ATTTGTGGAA GAAGAGACAG ATAATGAAGA AAACTTTATT
10 GATCTCAACG TTTTAAAGGC CCAGACATAT CACTTGGATA TGAACGAGAC
TGCCAAACAA GAAGATATTT TGAATCCAC AACAGATGCT GCAGAATGGA
GCCTAGAAGT GGAACGTGTA CTACCGCAAC TGAAAGTCAC GATTAGGACT
GACAATAAGG ATTGGAGAAT CCATGTTGAC CAAATGCACC AGCACAGAAG
TGGAATTGAA TCTGCTCTAA AGGAGACCAA GGGATTTTGT GACAAACTCC
15 ATAATGAAAT TACTAGGACT TTGGAAAAGA TCAGCAGCCG AGAAAAGTAC
ATCAACAATC AGCCGGGAGC CCATGGAGCA CTGTCCTCAG AGATGCGCAG
GTTAGGCTCA CTGCTAGGC CAGGCCACC TTAGTCACTG TGGACTGGCA
ATGGAAGCTC TTCCTGGACA CACCTGCCCT AGCCCTCACC CTGGGGTGGA
AGAGAAATGA GCTTGGCTTG CAACTCAGAC CATTCCACGG AGGCATCCTC
20 CCCTTCCCTG GGCTGGTGAA TAAAAGTTTC CTGAGGTCAA GGACTTCCTT
TTCCCTGCCA AAATGGTGTC CAGAACTTTG AGGCCAGAGG TGATCCAGTG
ATTTGGGAGC TGCAGGTCAC ACAGGCTGCT CAGAGGGCTG CTGAACAGGA
TGTCTCGGA CGACAGGCAC CTGGGCTCCA GCTGCGGCTC CTTCATCAAG
ACTGAGCCGT CCAGCCCGTC CTCGGGCATA GATGCCCTCA GCCACCACAG
25 CCCAGTGGC TCGTCCGACG CCAGCGGCGG CTTTGGCCTG GCCCTGGGCA
CCCACGCCAA CGGTCTGGAC TCGCCACCCA TGTTTGCAGG CGCCGGGCTG
GGAGGCACCC CATGCCGCAA GAGCTACGAG GACTGTGCCA GCGGCATCAT
GGAGGACTCG GCCATCAAGT GCGAGTACAT GCTCAACGCC ATCCCCAAGC
GCCTGTGCCT CGTGTGCGGG GACATTGCCT CTGGCTACCA CTACGGCGTG
30 GCCTCCTGCG AGGCTTGCAA GGCCTTCTTC AAGAGGACTA TCCAAGGGAA
CATTGAGTAC AGCTGCCCGG CCACCAACGA GTGCGAGATC ACCAAACGGA
GGCGCAAGTC CTGCCAGGCC TGCCGCTTCA TGAAATGCCT CAAAGTGGGG
ATGCTGAAGG AAGGTGTGCG CCTTGATCGA GTGCGTGGAG GCCGTCAGAA
ATACAAGCGA CGGCTGGACT CAGAGAGCAG CCCATACCTG AGCTTACAAA
35 TTTCTCCACC TGCTAAAAAG CCATTGACCA AGATTGTCTC ATACCTACTG

GTGGCTGAGC CGGACAAGCT CTATGCCATG CCTCCCCCTG GTATGCCTGA
 GGGGGACATC AAGGCCCTGA CCACTCTCTG TGACCTGGCA GACCGAGAGC
 TTGTGGTCAT CATTGGCTGG GCCAAGCACA TCCCAGGCTT CTCAAGCCTC
 TCCCTGGGGG ACCAGATGAG CCTGCTGCAG AGTGCCTGGA TGGAAATCCT
 5 CATCCTGGGC ATCGTGTACC GCTCGCTGCC CTACGACGAC AAGCTGGTGT
 ACGCTGAGGA CTACATCATG GATGAGGAGC ACTCCCGCCT CGCGGGGCTG
 CTGGAGCTCT ACCGGGCCAT CCTGCAGCTG GTACGCAGGT ACAAGAAGCT
 CAAGGTGGAG AAGGAGGAGT TTGTGACGCT CAAGGCCCTG GCCCTCGCCA
 ACTCCGATTC CATGTACATC GAGGATCTAG AGGCTGTCCA GAAGCTGCAG
 10 GACCTGCTGC ACGAGGCACT GCAGGACTAC GAGCTGAGCC AGCGCCATGA
 GGAGCCCTGG AGGACGGGCA AGCTGCTGCT GACACTGCCG CTGCTGCGGC
 AGACGGCCGC CAAGGCCGTG CAGCACTTCT ATAGCGTCAA ACTGCAGGGC
 AAAGTGCCCA TGCACAACT CTTCCCTGGAG ATGCTGGAGG CCAAGGCCTG
 GGCCAGGGCT GACTCCCTTC AGGAGTGGAG GCCACTGGAG CAAGTGCCCT
 15 CTCCCCTCCA CCGAGCCACC AAGAGGCAGC ATGTGCATTT CCTAACTCCC
 TTGCCCCCTC CCCCATCTGT GGCTGGGTG GGCCTGCTC AGGCTGGATA
 CCACCTGGAG GTTTTCCTTC CGCAGAGGGC AGGTTGGCCA AGAGCAGCTT
 AGAGGATCTC CCAAGGATGA AAGAATGTCA AGCCATGATG GAAAATGCCC
 CTTCCAATCA GCTGCCTTCA CAAGCAGGGA TCAGAGCAAC TCCCCGGGGA
 20 TCCCCAATCC ACGCCCTTCT AGTCCAACCC CCCTCAATGA GAGAGGCAGG
 CAGATCTCAC CCAGCACTAG GACACCAGGA GGCCAGGGAA AGCATCTCTG
 GCTCACCATG TAACATCTGG CTTGGAGCAA GTGGGTGTTT TGCACACCAG
 GCAGCTGCAC CTCACTGGAT CTAGTGTTGC TCGAGTGAC CTCACTTCAG
 AGCCCCCTCTA GCAGAGTGGG GCGGAAGTCC TGATGGTTGG TGTCCATGAG
 25 GTGGAAG (SEQ ID NO:1).

10. A DNA molecule of claim 9 which comprises from about nucleotide 950 to about nucleotide 2452 of SEQ ID NO:1.

30 11. An expression vector for expressing a human nNR1 protein wherein said expression vector comprises a DNA molecule of claim 9.

12. An expression vector for expressing a human nNR1 protein wherein said expression vector comprises a DNA molecule of claim 11.

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13. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 11.

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14. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 12.

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15. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 11 into a suitable host cell; and,

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(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

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16. A purified DNA molecule encoding a human nNR1 protein wherein said DNA molecule consists of the nucleotide sequence as set forth in SEQ ID NO:1, as follows:

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GAATATGATG ACCCTAATGC AACAATATCT AACATACTAT CCGAGCTTCG
 GTCATTTGGA AGAACTGCAG ATTTTCCTCC TTCAAAATTA AAGTCAGGTT
 ATGGAGAACA TGTATGCTAT GTTCTTGATT GCTTCGCTGA AGAAGCATTG
 AAATATATTG GTTTCACCTG GAAAAGGCCA ATATACCCAG TAGAAGAATT
 AGAAGAAGAA AGCGTTGCAG AAGATGATGC AGAATTAACA TTAAATAAAG
 TGGATGAAGA ATTTGTGGAA GAAGAGACAG ATAATGAAGA AACTTTTATT
 GATCTCAACG TTTTAAAGGC CCAGACATAT CACTTGGATA TGAACGAGAC
 TGCCAAACAA GAAGATATTT TGGAATCCAC AACAGATGCT GCAGAATGGA
 GCCTAGAAGT GGAACGTGTA CTACCGCAAC TGAAAGTCAC GATTAGGACT

GACAATAAGG ATTGGAGAAT CCATGTTGAC CAAATGCACC AGCACAGAAG
 TGGAATTGAA TCTGCTCTAA AGGAGACCAA GGGATTTTGT GACAAACTCC
 ATAATGAAAT TACTAGGACT TTGGAAAAGA TCAGCAGCCG AGAAAAGTAC
 ATCAACAATC AGCCGGGAGC CCATGGAGCA CTGTCCTCAG AGATGCGCAG
 5 GTTAGGCTCA CTGTCTAGGC CAGGCCACC TTAGTCACTG TGGACTGGCA
 ATGGAAGCTC TTCCTGGACA CACCTGCCCT AGCCCTCACC CTGGGGTGGA
 AGAGAAATGA GCTTGGCTTG CAACTCAGAC CATTCCACGG AGGCATCCTC
 CCCTTCCCTG GGCTGGTGAA TAAAAGTTTC CTGAGGTCAA GGACTTCCTT
 TTCCCTGCCA AAATGGTGTC CAGAACTTTG AGGCCAGAGG TGATCCAGTG
 10 ATTTGGGAGC TGCAGGTCAC ACAGGCTGCT CAGAGGGCTG CTGAACAGGA
 TGTCCTCGGA CGACAGGCAC CTGGGCTCCA GCTGCGGCTC CTTCATCAAG
 ACTGAGCCGT CCAGCCCGTC CTCGGGCATA GATGCCCTCA GCCACCACAG
 CCCAGTGGC TCGTCCGACG CCAGCGGCGG CTTTGGCCTG GCCCTGGGCA
 CCCACGCCAA CGGTCTGGAC TCGCCACCCA TGTTTGAGG CGCCGGGCTG
 15 GGAGGCACCC CATGCCGCAA GAGCTACGAG GACTGTGCCA GCGGCATCAT
 GGAGGACTCG GCCATCAAGT GCGAGTACAT GCTCAACGCC ATCCCCAAGC
 GCCTGTGCCT CGTGTGCGGG GACATTGCCT CTGGCTACCA CTACGGCGTG
 GCCTCCTGCG AGGCTTGCAA GGCCTTCTTC AAGAGGACTA TCCAAGGGAA
 CATTGAGTAC AGCTGCCCGG CCACCAACGA GTGCGAGATC ACCAAACGGA
 20 GGCGCAAGTC CTGCCAGGCC TGCCGCTTCA TGAAATGCCT CAAAGTGGGG
 ATGCTGAAGG AAGGTGTGCG CCTTGATCGA GTGCGTGGAG GCCGTCAGAA
 ATACAAGCGA CGGCTGGACT CAGAGAGCAG CCCATACCTG AGCTTACAAA
 TTTCTCCACC TGCTAAAAAG CCATTGACCA AGATTGTCTC ATACCTACTG
 GTGGCTGAGC CGGACAAGCT CTATGCCATG CCTCCCCCTG GTATGCCTGA
 25 GGGGGACATC AAGGCCCTGA CCACTCTCTG TGACCTGGCA GACCGAGAGC
 TTGTGGTCAT CATTGGCTGG GCCAAGCACA TCCCAGGCTT CTCAAGCCTC
 TCCCTGGGGG ACCAGATGAG CCTGCTGCAG AGTGCCTGGA TGGAAATCCT
 CATCCTGGGC ATCGTGTACC GCTCGCTGCC CTACGACGAC AAGCTGGTGT
 ACGCTGAGGA CTACATCATG GATGAGGAGC ACTCCCGCCT CGCGGGGCTG
 30 CTGGAGCTCT ACCGGGCCAT CCTGCAGCTG GTACGCAGGT ACAAGAAGCT
 CAAGGTGGAG AAGGAGGAGT TTGTGACGCT CAAGGCCCTG GCCCTCGCCA
 ACTCCGATTC CATGTACATC GAGGATCTAG AGGCTGTCCA GAAGCTGCAG
 GACCTGCTGC ACGAGGCACT GCAGGACTAC GAGCTGAGCC AGCGCCATGA
 GGAGCCCTGG AGGACGGGCA AGCTGCTGCT GACACTGCCG CTGCTGCGGC
 35 AGACGGCCGC CAAGGCCGTG CAGCACTTCT ATAGCGTCAA ACTGCAGGGC

AAAGTGCCCA TGCACAAACT CTTCTGGAG ATGCTGGAGG CCAAGGCCTG
GGCCAGGGCT GACTCCCTTC AGGAGTGGAG GCCACTGGAG CAAGTGCCCT
CTCCCCTCCA CCGAGCCACC AAGAGGCAGC ATGTGCATTT CCTAACTCCC
TTGCCCCCTC CCCCATCTGT GGCCTGGGTG GGCAGTGTCT AGGCTGGATA
5 CCACCTGGAG GTTTTCCTTC CGCAGAGGGC AGGTTGGCCA AGAGCAGCTT
AGAGGATCTC CCAAGGATGA AAGAATGTCA AGCCATGATG GAAAATGCCC
CTTCCAATCA GCTGCCTTCA CAAGCAGGGA TCAGAGCAAC TCCCCGGGGA
TCCCCAATCC ACGCCCTTCT AGTCCAACCC CCCTCAATGA GAGAGGCAGG
CAGATCTCAC CCAGCACTAG GACACCAGGA GGCCAGGGAA AGCATCTCTG
10 GCTCACCATG TAACATCTGG CTTGGAGCAA GTGGGTGTTC TGCACACCAG
GCAGCTGCAC CTCAGTGGAT CTAGTGTTGC TGCAGGTGAC CTCAGTTCAG
AGCCCCTCTA GCAGAGTGGG GCGGAAGTCC TGATGGTTGG TGTCCATGAG
GTGGAAG (SEQ ID NO:1).

15 17. A DNA molecule of claim 16 which consists of
nucleotide 950 to about nucleotide 2452 of SEQ ID NO:1.

20 18. An expression vector for expressing a human nNR1
protein wherein said expression vector comprises a DNA molecule of
claim 16.

25 19. An expression vector for expressing a human nNR1
protein wherein said expression vector comprises a DNA molecule of
claim 17.

20. A host cell which expresses a recombinant human
nNR1 protein wherein said host cell contains the expression vector of
claim 18.

30 21. A host cell which expresses a recombinant human
nNR1 protein wherein said host cell contains the expression vector of
claim 19.

22. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

5 (a) transfecting the expression vector of claim 18 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

23. A purified DNA molecule encoding a human nNR2 protein wherein said protein comprises the amino acid sequence as follows:

15 MDSVELCLPE SFSLHYEEEL LCRMSNKDRH IDSSCSSFIK TEPSSPASLT
DSVNHHSPPG SSASGSYSS TMNGHQGLD SPPLYPSAPI LGGSGPVRKL
YDDCSSTIVE DPQTKCEYML NSMPKRLCLV CGDIASGYHY GVASCEACKA
FFKRTIQGNI EYSCPATNEC EITKRRRKSC QACRFMKCLK VGMLKEGVRL
DRVRGGRQKY KRRIDAENSP YLNPQLVQPA KKPYNKIVSH LLVAEPEKIY
20 AMPDPTVPDS DIKALTTLCD LADRELVVII GWAKHIPGFS TSLADQMSL
LQSAWMEILI LGVVYRSLSF EDELVYADDY IMDEDQSKLA GLLDLNNAIL
QLVKKYKSMK LEKEEFVTLK AIALANSDSM HIEDVEAVQK LQDVLHEALQ
DYEAGQHMED PRRAGKMLMT LPLLRTSTK AVQHFYNIKL EGKVPMHKLF
LEMLEAKV, as set forth in three-letter abbreviation in SEQ ID NO:4.

24. An expression vector for expressing a human nNR2 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 23.

25. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 24.

26. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 24 into a suitable host cell; and,

5 (b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

10 27. A purified DNA molecule encoding a human nNR2 protein wherein said protein consists of the amino acid sequence as follows:

MDSVELCLPE SFSLHYEEEL LCRMSNKDRH IDSSCSSFIK TEPSSPASLT
 DSVNHHSPGG SSDASGSYSS TMNGHQGLD SPPLYPSAPI LGGSGPVRKL
 YDDCSSTIVE DPQTKCEYML NSMPKRLCLV CGDIASGYHY GVASCEACKA
 FFKRTIQGNI EYSCPATNEC EITKRRRKSC QACRFMKCLK VGMLKEGVRL
 15 DRVRGGRQKY KRRIDAENSP YLNPQLVQPA KKPYNKIVSH LLVAEPEKIY
 AMPDPTVPDS DIKALTTLCD LADRELVVII GWAKHIPGFS TSLADQMSL
 LQSAWMEILI LGVVYRSLSF EDELVYADDY IMDEDQSKLA GLLDLNNAIL
 QLVKKYKSMK LEKEEFVTLK AIALANSDSM HIEDVEAVQK LQDVLHEALQ
 DYEAGQHMED PRRAGKMLMT LPLLRTSTK AVQHFYNIKL EGKVPMHKLF
 20 LEMLEAKV, as set forth in three letter code as SEQ ID NO 4.

25 28. An expression vector for expressing a human nNR2 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 27.

29. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 28.

30 30. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 28 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

31. A purified DNA molecule encoding a human nNR2 protein wherein said DNA molecule comprises the nucleotide sequence as set forth in SEQ ID NO:3, as follows:

10 GCGGGCCGCC AGTGTGGTGG AATTCGGCTT GTCACTAGGA GAACATTTGT
GTTAATTGCA CTGTGCTCTG TCAAGGAAAC TTTGATTTAT AGCTGGGGTG
CACAAATAAT GGTTGCCGGT CGCACATGGA TTCGGTAGAA CTTTGCCTTC
CTGAATCTTT TTCCCTGCAC TACGAGGAAG AGCTTCTCTG CAGAATGTCA
15 AACAAAGATC GACACATTGA TTCCAGCTGT TCGTCCTTCA TCAAGACGGA
ACCTTCCAGC CCAGCCTCCC TGACGGACAG CGTCAACCAC CACAGCCCTG
GTGGCTCTTC AGACGCCAGT GGGAGCTACA GTTCAACCAT GAATGGCCAT
CAGAACGGAC TTGACTCGCC ACCTCTCTAC CCTTCTGCTC CTATCCTGGG
AGGTAGTGGG CCTGTCAGGA AACTGTATGA TGACTGCTCC AGCACCATTG
20 TTGAAGATCC CCAGACCAAG TGTGAATACA TGCTCAACTC GATGCCCAAG
AGACTGTGTT TAGTGTGTGG TGACATCGCT TCTGGGTACC ACTATGGGGT
AGCATCATGT GAAGCCTGCA AGGCATTCTT CAAGAGGACA ATTCAAGGCA
ATATAGAATA CAGCTGCCCT GCCACGAATG AATGTGAAAT CACAAAGCGC
AGACGTAAAT CCTGCCAGGC TTGCCGCTTC ATGAAGTGTT TAAAAGTGGG
25 CATGCTGAAA GAAGGGGTGC GTCTTGACAG AGTACGTGGA GGTCGGCAGA
AGTACAAGCG CAGGATAGAT GCGGAGAACA GCCCATACTT GAACCCTCAG
CTGGTTCAGC CAGCCAAAAA GCCATATAAC AAGATTGTCT CACATTTGTT
GGTGGCTGAA CCGGAGAAGA TCTATGCCAT GCCTGACCCT ACTGTCCCCG
ACAGTGACAT CAAAGCCCTC ACTACACTGT GTGACTTGGC CGACCGAGAG
30 TTGGTGGTTA TCATTGGATG GGCGAAGCAT ATTCCAGGCT TCTCCACGCT
GTCCCTGGCG GACCAGATGA GCCTTCTGCA GAGTGCTTGG ATGGAAATTT
TGATCCTTGG TGTCGTATAC CGGTCTCTTT CATTTGAGGA TGAACCTGTC
TATGCAGACG ATTATATAAT GGACGAAGAC CAGTCCAAAT TAGCAGGCCT
TCTTGATCTA AATAATGCTA TCCTGCAGCT GGTAAAGAAA TACAAGAGCA
35 TGAAGCTGGA AAAAGAAGAA TTTGTCACCC TCAAAGCTAT AGCTCTTGCT

AATTCAGACT CCATGCACAT AGAAGATGTT GAAGCCGTTT AGAAGCTTCA
 GGATGTCTTA CATGAAGCGC TGCAGGATTA TGAAGCTGGC CAGCACATGG
 AAGACCCTCG TCGAGCTGGC AAGATGCTGA TGACACTGCC ACTCCTGAGG
 CAGACCTCTA CCAAGGCCGT GCAGCATTTT TACAACATCA AACTAGAAGG
 5 CAAAGTCCCA ATGCACAAAC TTTTTTTGGA AATGTTGGAG GCCAAGGTCT
 GACTAAAAGC TCCCTGGGCC TTCCCATCCT TCATGTTGAA AAAGGGAAAA
 TAAACCCAAG AGTGATGTCT AAGAACTTA GAGTTTAGTT AACAACATCA
 AAAATCAACA GACTGCACTG ATAATTTAGC AGCAAGACTA TGAAGCAGCT
 TTCAGATTCC TCCATAGGTT CCTGATGAGT TCTTTCTACT TTCTCCATCA
 10 TCTTCTTTCC TCTTTCTTCC CACATTTCTC TTTCTCTTTA TTTTTTCTCC
 TTTTCTTCTT TCACCTCCCT TATTTCTTTG CTTCTTTTCAT TCCTAGTTCC
 CATTCTCCTT TATTTTCTTC CCGTCTGCCT GCCTTCTTTC TTTTCTTTAC
 CTAATCTCAT TCCTCTCTTT TCTCATCCTT CCCCTTTTTT CTAAATTTGA
 AATAGCTTTA GTTTAAAAAA AAAAATCCTC CCTTCCCCCT TTCCTTTCCC
 15 TTTCTTTCCT TTTTCCCTTT CCTTTTCCCT TTCCTTTCCT TTCCTCTTGA
 CCTTCTTTCC ATCTTTCTTT TTCTTCCTTC TGCTGCTGAA CTTTAAAG
 AGGTCTCTAA CTGAAGAGAG ATGGAAGCCA GCCCTGCCAA AGGATGGAGA
 TCCATAATAT GGATGCCAGT GAACTTATTG TGAACCATAC CGTCCCCAAT
 GACTAAGGAA TCAAAGAGAG AGAACCAACG TTCCTAAAAG TACAGTGCAA
 20 CATATACAAA TTGACTGAGT GCAGTATTAG ATTTTCATGGG AGCAGCCTCT
 AATTAGACAA CTTAAGCAAC GTTGCATCGG CTGCTTCTTA TCATTGCTTT
 TCCATCTAGA TCAGTTACAG CCATTTGATT CCTTAATTGT TTTTCAAGT
 CTTCCAGGTA TTTGTTAGTT TAGCTACTAT GTAACTTTTT CAGGGAATAG
 TTTAAGCTTT ATTCATTCAT GCAATACTAA AGAGAAATAA GAATACTGCA
 25 ATTTTGTGCT GGCTTTGAAC AATTACGAAC AATAATGAAG GACAAATGAA
 TCCTGAAGGA AGATTTTAA AAATGTTTTG TTTCTTCTTA CAAATGGAGA
 TTTTTTTGTA CCAGCTTTAC CACTTTTCAG CCATTTATTA ATATGGGAAT
 TTAACCTACT CAAGCAATAG TTGAAGGGAA GGTGCATATT ATCACGGATG
 CAATTTATGT TGTGTGCCAG TCTGGTCCCA AACATCAATT TCTTAACATG
 30 AGCTCCAGTT TACCTAAATG TTCACTGACA CAAAGGATGA GATTACACCT
 ACAGTGACTC TGAGTAGTCA CATATATAAG CACTGCACAT GAGATATAGA
 TCCGTAGAAT TGTCAGGAGT GCACCTCTCT ACTTGGGAGG TACAATTGCC
 ATATGATTTT TAGCTGCCAT GGTGGTTAGG AATGTGATAC TGCCTGTTTG
 CAAAGTCACA GACCTTGCCT CAGAAGGAGC TGTGAGCCAG TATTCATTTA
 35 AGAGAATTCC ACCACACTGG CGGCCCGCGC TTGAT (SEQ ID NO:3).

32. A DNA molecule of claim 31 which comprises from about nucleotide 126 to about nucleotide 1382 of SEQ ID NO:3.

5 33. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 31.

10 34. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 32.

15 35. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 33.

20 36. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 34.

37. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

25 (a) transfecting the expression vector of claim 33 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

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38. A purified DNA molecule encoding a human nNR2 protein wherein said DNA molecule consists of the nucleotide sequence as set forth in SEQ ID NO:3, as follows:

5 GCGGGCCGCC AGTGTGGTGG AATTCGGCTT GTCACTAGGA GAACATTTGT
GTTAATTGCA CTGTGCTCTG TCAAGGAAAC TTTGATTTAT AGCTGGGGTG
CACAAATAAT GGTGCGCGGT CGCACATGGA TTCGGTAGAA CTTTGCCTTC
CTGAATCTTT TTCCCTGCAC TACGAGGAAG AGCTTCTCTG CAGAATGTCA
AACAAAGATC GACACATTGA TTCCAGCTGT TCGTCCTTCA TCAAGACGGA
ACCTTCCAGC CCAGCCTCCC TGACGGACAG CGTCAACCAC CACAGCCCTG
10 GTGGCTCTTC AGACGCCAGT GGGAGCTACA GTTCAACCAT GAATGGCCAT
CAGAACGGAC TTGACTCGCC ACCTCTCTAC CCTTCTGCTC CTATCCTGGG
AGGTAGTGGG CCTGTCAGGA AACTGTATGA TGACTGCTCC AGCACCATTG
TTGAAGATCC CCAGACCAAG TGTGAATACA TGCTCAACTC GATGCCCAAG
AGACTGTGTT TAGTGTGTGG TGACATCGCT TCTGGGTACC ACTATGGGGT
15 AGCATCATGT GAAGCCTGCA AGGCATTCTT CAAGAGGACA ATTCAAGGCA
ATATAGAATA CAGCTGCCCT GCCACGAATG AATGTGAAAT CACAAAGCGC
AGACGTAAAT CCTGCCAGGC TTGCCGCTTC ATGAAGTGTT TAAAAGTGGG
CATGCTGAAA GAAGGGGTGC GTCTTGACAG AGTACGTGGA GGTCGGCAGA
AGTACAAGCG CAGGATAGAT GCGGAGAACA GCCCATACCT GAACCCTCAG
20 CTGGTTCAGC CAGCCAAAAA GCCATATAAC AAGATTGTCT CACATTTGTT
GGTGGCTGAA CCGGAGAAGA TCTATGCCAT GCCTGACCCT ACTGTCCCCG
ACAGTGACAT CAAAGCCCTC ACTACACTGT GTGACTTGGC CGACCGAGAG
TTGGTGGTTA TCATTGGATG GGCGAAGCAT ATTCCAGGCT TCTCCACGCT
GTCCCTGGCG GACCAGATGA GCCTTCTGCA GAGTGCTTGG ATGGAAATTT
25 TGATCCTTGG TGTCGTATAC CGGTCTCTTT CATTTGAGGA TGAACCTGTC
TATGCAGACG ATTATATAAT GGACGAAGAC CAGTCCAAAT TAGCAGGCCT
TCTTGATCTA AATAATGCTA TCCTGCAGCT GGTAAGAGAA TACAAGAGCA
TGAAGCTGGA AAAAGAAGAA TTTGTCACCC TCAAAGCTAT AGCTCTTGCT
AATTCAGACT CCATGCACAT AGAAGATGTT GAAGCCGTTT AGAAGCTTCA
30 GGATGTCTTA CATGAAGCGC TGCAGGATTA TGAAGCTGGC CAGCACATGG
AAGACCCTCG TCGAGCTGGC AAGATGCTGA TGACACTGCC ACTCCTGAGG
CAGACCTCTA CCAAGGCCGT GCAGCATTTC TACAACATCA AACTAGAAGG
CAAAGTCCCA ATGCACAAAC TTTTTTTTGA AATGTTGGAG GCCAAGGTCT
GACTAAAAGC TCCCTGGGCC TTCCCATCCT TCATGTTGAA AAAGGGAAAA
35 TAAACCCAAG AGTGATGTCG AAGAACTTA GAGTTTAGTT AACAACATCA

AAAATCAACA GACTGCACTG ATAATTTAGC AGCAAGACTA TGAAGCAGCT
 TTCAGATTCC TCCATAGGTT CCTGATGAGT TCTTTCTACT TTCTCCATCA
 TCTTCTTTCC TCTTTCTTCC CACATTTCTC TTTCTCTTTA TTTTCTCTCC
 TTTTCTTCTT TCACCTCCCT TATTTCTTTG CTTCTTTTCAT TCCTAGTTCC
 5 CATTCTCCTT TATTTTCTTC CCGTCTGCCT GCCTTCTTTC TTTTCTTTAC
 CTACTCTCAT TCCTCTCTTT TCTCATCCTT CCCCTTTTTT CTAAATTTGA
 AATAGCTTTA GTTTAAAAAA AAAAATCCTC CCTTCCCCCT TTCCTTTCCC
 TTTCTTTCCT TTTTCCCTTT CCTTTTCCCT TTCCTTTCCT TTCCTCTTGA
 CCTTCTTTCC ATCTTTCTTT TTCTTCCTTC TGCTGCTGAA CTTTAAAG
 10 AGGTCTCTAA CTGAAGAGAG ATGGAAGCCA GCCCTGCCAA AGGATGGAGA
 TCCATAATAT GGATGCCAGT GAACTTATTG TGAACCATAC CGTCCCCAAT
 GACTAAGGAA TCAAAGAGAG AGAACCAACG TTCCTAAAAG TACAGTGCAA
 CATATACAAA TTGACTGAGT GCAGTATTAG ATTTTCATGGG AGCAGCCTCT
 AATTAGACAA CTTAAGCAAC GTTGCATCGG CTGCTTCTTA TCATTGCTTT
 15 TCCATCTAGA TCAGTTACAG CCATTTGATT CCTTAATTGT TTTTCAAGT
 CTTCCAGGTA TTTGTTAGTT TAGCTACTAT GTAACTTTTT CAGGGAATAG
 TTTAAGCTTT ATTCATTCAT GCAATACTAA AGAGAAATAA GAATACTGCA
 ATTTTGTGCT GGCTTTGAAC AATTACGAAC AATAATGAAG GACAAATGAA
 TCCTGAAGGA AGATTTTTAA AAATGTTTTG TTTCTTCTTA CAAATGGAGA
 20 TTTTTTTGTA CCAGCTTTAC CACTTTTCAG CCATTTATTA ATATGGGAAT
 TTAACCTACT CAAGCAATAG TTGAAGGGAA GGTGCATATT ATCACGGATG
 CAATTTATGT TGTGTGCCAG TCTGGTCCCA AACATCAATT TCTTAACATG
 AGCTCCAGTT TACCTAAATG TTCACTGACA CAAAGGATGA GATTACACCT
 ACAGTGACTC TGAGTAGTCA CATATATAAG CACTGCACAT GAGATATAGA
 25 TCCGTAGAAT TGTCAGGAGT GCACCTCTCT ACTTGGGAGG TACAATTGCC
 ATATGATTTT TAGCTGCCAT GGTGGTTAGG AATGTGATAC TGCCTGTTTG
 CAAAGTCACA GACCTTGCCT CAGAAGGAGC TGTGAGCCAG TATTCATTTA
 AGAGAATTCC ACCACACTGG CGGCCCGCGC TTGAT (SEQ ID NO:3).

30 39. A DNA molecule of claim 38 which consists of
 nucleotide 126 to about nucleotide 1382 of SEQ ID NO:3.

35 40. An expression vector for expressing a human nNR2
 protein wherein said expression vector comprises a DNA molecule of
 claim 38.

41. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 39.

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42. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 40.

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43. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 41.

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44. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 40 into a suitable host cell; and,

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(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR2 protein from said expression vector.